

**COMMONWEALTH OF VIRGINIA**  
**Department of Environmental Quality**  
**Valley Regional Office**

**STATEMENT OF LEGAL AND FACTUAL BASIS**  
**Title V Permit Reopening**

E. I. DuPont de Nemours & Co., Inc.  
Waynesboro, Virginia  
Permit No. VRO80517  
Effective Date: January 16, 2002  
Expiration Date: January 16, 2007

In accordance with 9 VAC 5-80-240.A of the Virginia Regulations for the Control and Abatement of Air Pollution, the Department of Environmental Quality is reopening the Federal Operating Permit issued pursuant to 9 VAC 5 Chapter 80, Article 1 of the Regulations for E. I. DuPont de Nemours & Co., Inc. The permit reopening is necessary to correct terms and conditions of the permit with respect to confidential business information. The permit will allow the above source to operate a synthetic fiber production facility.

Engineer/Permit Contact:\_\_\_\_\_ Date:\_\_\_\_\_

Air Permit Manager:\_\_\_\_\_ Date:\_\_\_\_\_

Regional Permit Manager:\_\_\_\_\_ Date:\_\_\_\_\_

## **INTRODUCTION**

In accordance with 9 VAC 5-80-240.A of the Virginia Regulations for the Control and Abatement of Air Pollution, the Department of Environmental Quality is reopening the Federal Operating Permit issued pursuant to 9 VAC 5 Chapter 80, Article 1 of the Regulations for E. I. DuPont de Nemours & Co., Inc.

## **REASON FOR REOPENING**

The permit reopening is necessary to correct terms and conditions of the permit with respect to confidential business information.

## **APPLICABILITY OF 9 VAC 5-80-240**

9 VAC 5-240.A dictates that a permit shall be reopened and revised under any of the conditions stated in 9 VAC 5-80-110.L. Specifically, 9 VAC 5-80-110.L.2 states that the permit shall be reopened if the board or administrator determines that there has been a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

*The permit reopening is necessary to correct material mistakes with respect to confidential business information. Section 503 of the Clean Air Act and 40 CFR Part 70.4(b)(3)(viii) state the contents of a Title V permit shall not be entitled to protection under Section 114(c) of the Clean Air Act (Inspections, monitoring and entry).*

Pursuant to 9 VAC 5-80-240.B, proceeding to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as possible.

*DEQ received a revised Title V application form from E. I. DuPont de Nemours & Co., Inc. on November 19, 2001. This application form contains the necessary information to revise the Title V permit. The revised Title V permit is scheduled for public notice on November 30, 2001.*

Pursuant to 9 VAC 5-80-240.C, reopenings shall not be initiated before notice of such intent is provided to the source by the board at least 30 days in advance of the date that the permit is to be reopened, except that the board may provide a shorter time period in the case of an emergency.

*DEQ received notice from DuPont, in a letter dated November 20, 2001, that it wishes to waive its right for notification under this section. DEQ has granted this waiver. DuPont is aware that the reopened permit will be public noticed on November 30, 2001.*

## CHANGES TO TITLE V OPERATING PERMIT

The substantive changes to the Title V operating permit are as listed below:

### **Deleted & Revised Permit Conditions**

(Condition numbers referenced are those contained in the Title V permit dated October 15, 2001)

Condition V.A.1 (revised): Control equipment requirements for VOC emissions from Lycra®.

*This permit condition has been revised to remove the requirement to control emissions through the use of improved VOC capture methods. The improved VOC capture methods were erroneously identified previously as add-on control devices. In fact, this equipment is considered an inherent part of the Lycra® process. Specifically, Lycra® cannot be operated without this equipment in place. As a result, this condition was revised to remove reference to improved VOC capture methods as a control device. The requirement to maintain and operate brine-cooled condensers under this condition remains.*

Condition V.A.2 (deleted): A production unit limit for Lycra®, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deemed unnecessary as a means of demonstrating compliance with either the hourly or annual Lycra® emission limits. In order to demonstrate compliance with the emission limits in Condition V.A.3, DuPont will conduct quarterly performance tests for VOC in accordance with NIOSH Method 2004 or DuPont Lab Procedure SP-0905.211-94. Since the annual emission limit is based on a full year of operation (8760 hours), compliance with the hourly emission limit also provides reasonable assurance of compliance with the annual emission limit.*

*The facility is also required to control VOC emissions from the Lycra® production facility through the use of brine-cooled condensers. In order to ensure consistent proper operation of these control devices, DuPont shall conduct and record the results of a daily inspection of each brine-cooled condenser. If the outlet gas temperature is not within the manufacturer's recommended range, timely corrective action shall be taken such that the brine-cooled condenser resumes proper operation. The requirement to inspect and maintain proper VOC control device operation provides additional assurance that the Lycra® production facility is operating within the prescribed emission limits.*

*The combination of all of these requirements provide reasonable assurance of compliance with emission limits for the Lycra® production facility.*

Condition V.B.3 (deleted): Monitoring condition requiring an inspection of the improved VOC capture methods.

*This permit condition was deleted based on the removal of the requirements for the improved VOC capture methods in Condition V.A.1.*

Condition V.C.1 (deleted): Recordkeeping of Lycra<sup>®</sup> production, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deleted based on the removal of the Condition V.A.2.*

Condition V.C.7 (deleted): Recordkeeping of monitoring inspections of the improved VOC capture methods.

*This permit condition was deleted based on the removal of the requirements for the improved VOC capture methods in Condition V.A.1.*

Condition VI.A.1 (deleted): A production unit limit for Permasep<sup>®</sup>, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deemed unnecessary as a means of demonstrating compliance with either the hourly or annual Permasep<sup>®</sup> emission limits. In order to demonstrate compliance with the emission limits in Condition VI.A.2, DuPont will conduct quarterly performance tests for VOC in accordance with SOP:WA-708-01 and DuPont Lab Procedure SP-0905.210-91 when the Permasep<sup>®</sup> production facility is in operation. Since the annual emission limit is based on a full year of operation (8760 hours), compliance with the hourly emission limit also provides reasonable assurance of compliance with the annual emission limit.*

Condition VI.C.1 (deleted): Recordkeeping of Permasep<sup>®</sup> production, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deleted based on the removal of the Condition VI.A.1.*

Condition VII.A.3 (deleted): A production unit limit for Nylon, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deemed unnecessary as a means of demonstrating compliance with either the hourly or annual Nylon emission limits. In order to demonstrate compliance with the emission limits in Condition VII.A.4, new permit terms and conditions have been established. These conditions are discussed below under New Permit Conditions.*

Condition VII.C.1 (deleted): Recordkeeping of Nylon production, calculated monthly as the sum of each consecutive 12-month period.

*This permit condition was deleted based on the removal of the Condition VII.A.3.*

**New Permit Conditions**

(Condition numbers referenced are those contained in the revised draft Title V permit)

Condition VII.A.3 (added): The total polymer supply pump rate (Ref. NP-36, NP-32, NP-52, NP-57, NP-80, NP-136, NP-102 and NP-139) shall not exceed 132.7 revolutions per minute (rpm).

*Condition VII.A.4 contains an hourly particulate emission limit for the Nylon fiber production facility which is based on total polymer supply pump rate (Ref. NP-36, NP-32, NP-52, NP-57, NP-80, NP-136, NP-102 and NP-139) shall not exceed 132.7 revolutions per minute (rpm). If the total polymer supply pump rate limit is not exceeded and the required Nylon process controls are operated properly when low-smoke finish is not in use, reasonable assurance that the hourly particulate emission limit will not be violated is provided.*

*Condition VII.A.4 also contains an annual particulate emission limit for the Nylon production facility. Since the annual emission limit is based on a full year of operation (8760 hours), compliance with the hourly emission limit also provides reasonable assurance of compliance with the annual emission limit.*

Condition VII.A.7 (added): A change to the polymer supply pumps or polymer supply pump system may require a permit to modify and operate.

Condition VII.B.2 (added): The permittee shall continuously monitor the total supply rate for the polymer supply pumps (Ref. NP-36, NP-32, NP-52, NP-57, NP-80, NP-136, NP-102 and NP-139) in revolutions per minute (rpm).

*Condition VII.A.4 contains an hourly and annual particulate emission limits for the Nylon production facility which are based on a total polymer supply pump rate of 132.7 revolutions per minute (rpm). This condition requires the facility to monitor the polymer supply pump rate on a continuous basis in order to collect data necessary to ascertain compliance with the particulate emission limits.*

Condition VII.B.5 (added): The permittee shall conduct a weekly inspection of the maximum total supply rate for the polymer supply pumps (Ref. NP-36, NP-32, NP-52, NP-57, NP-80, NP-136, NP-102 and NP-139) in revolutions per minute (rpm).

*In order to ensure proper operation of the polymer supply pumps as well as compliance with the applicable particulate emission limits in Condition VII.A.4, the permittee will conduct a weekly inspection of the maximum total supply rate for the polymer supply pumps. If during the inspection, the maximum weekly polymer supply pump rate exceeded 132.7 rpm, timely*

*corrective action shall be taken such that the polymer supply pumps resume proper operation.*

Conditions VII.C.1 and VII.C.7 (added): Recordkeeping of the maximum weekly polymer supply pump rate (VII.C.1) and polymer supply pump inspections (VII.C.7).

*These recordkeeping conditions were added in order to provide additional assurance that the aforementioned requirements in Conditions VII.A.3, VII.B.2, and VII.B.5 are met.*

### **Miscellaneous Permit Changes**

Permit references were revised to reflect those contained in the revised minor New Source Review (NSR) permit dated November 29, 2001 (see attached permit).

Additionally, Section X. General Conditions F and U were modified to reflect current boilerplate language. Specific details with respect to the modification of General Condition U are presented below:

#### **U: Malfunction as an Affirmative Defense**

*The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F.*

*General Condition U cites the sections that follow:*

*U.2.d. 9 VAC 5-80-110. Permit Content*

*U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction*

### **PUBLIC PARTICIPATION**

A public notice regarding the draft permit was placed in the Waynesboro News-Virginian, on November 30, 2001. EPA was sent a copy of the draft permit and notified of the public notice on November 30, 2001. West Virginia, the only affected state, was sent a copy of the public notice in a letter dated November 27, 2001. All persons on the Title V mailing list were also sent a copy of the public notice in letters dated November 30, 2001.

Public comments were accepted from November 30, 2001, to December 30, 2001. No comments were received from the public, the affected state, or EPA regarding the draft permit.

**Attachment:** Minor NSR Permit (November 29, 2001)